

Further discussion of the subject was made by Dr. D. G. Brinton and Prof. F. W. Putnam.

The hour of ten having been passed, the Society was adjourned.

Stated Meeting, November 20, 1896.

President, Mr. FRALEY, in the Chair.

Present, 44 members.

Minutes of meeting, November 6, were read and approved. Correspondence was submitted as follows :

A letter from Hon. Mayer Sulzberger, accepting the duty of preparing an obituary notice of the late Joseph B. Townsend, Esq.

Letters of envoy from the Akad. der Wissenschaften, Vienna, Austria ; Schlesische Gesell. f. Vaterländische Cultur, Breslau, Prussia ; K. Sächsische Gesell. der Wissenschaften, Leipzig.

Letters of acknowledgment from the Royal Society of Victoria, Melbourne (148, 149) ; Physico-Math. Society, Kasan, Russia (150) ; Library of Marine Ministry, Prof. Serge Nikitin, St. Petersburg, Russia (150) ; K. K. Sternwarte, Prague, Bohemia (150) ; K. K. Central-Anstalt f. Meteorologie, etc., Dr. Friederich S. Krauss, Vienna, Austria (150) ; Naturforschende Gesell. des Osterlandes, Altenburg, Prussia (150) ; Gesell. f. Erdkunde, Berlin, Prussia (150) ; K. Sächs. Meteorol. Institut, Chemnitz (150) ; Verein f. Erdkunde (150), Mrs. Zelia Nuttall, Dresden, Saxony (147-150) ; Prof. R. W. Bunsen, Heidelberg, Germany (150) ; K. Sächs. Gesell. d. Wissenschaften, Leipzig (148-150) ; Verein f. Erdkunde, Metz, Germany (149) ; K. Sternwarte, Munich, Bavaria (150) ; Verein f. Vaterländische Naturkunde in Württemberg, Stuttgart (150) ; R. Accad. di Scienze, etc., Modena, Italy (149) ; Acad. des Sciences et Belles-Lettres, Angers, France (148) ; Soc. des Sciences Nat. et Archeol. de la Creuse, Guéret,

France (148); Soc. Geologique (149, 150), Prince Roland Bonaparte (149), Dr. Edward Pepper, Paris, France (150); Mr. Samuel Timmins, Arley, Coventry, Eng. (150); Prof. I. Legge, Oxford, Eng. (150); Gen. H. L. Abbot, Cambridge, Mass. (151); Geological Society of America, Rochester, N. Y. (151); Oneida Historical Society, Utica, N. Y. (150); Lackawanna Institute of History and Science, Scranton, Pa. (122, 135, 139, 141, 142, 145, 148); Texas Academy of Science, Austin (151); Iowa Masonic Library, Cedar Rapids (149-151); Meteorological Observatory, Xalapa, Mex. (151); Comité Géolog. de Russie (148, 149).

Accessions to the Library were reported from the R. Society of S. Australia, Adelaide; Akad. der Wissenschaften, Vienna, Austria; Schlesische Gesell. f. Vaterländ. Cultur, Breslau, Prussia; Naturhist. Gesellschaft, Nürnberg, Bavaria; Prof. G. de Mortellet, Paris, France; R. Society of Antiquaries of Ireland, Dublin; Royal Society, London, Eng.; American Academy Arts and Sciences, Boston, Mass.; Dr. Charles A. Oliver, Philadelphia; Wyoming Historical and Geological Society, Wilkesbarre, Pa.; Leander McCormick Observatory, Charlottesville, Va.; Department of State, American Anthropological Society, Washington, D. C.; Ministerio de Fomento, Dr. Nicolas Léon, Mexico, Mex.; Lick Observatory, Mount Hamilton, Cal.

A copy of the bronze medal issued by the Kings County, N. Y., Medical Society in commemoration of Dr. Jenner.

Prof. Dr. H. V. Hilprecht made a preliminary and informal statement concerning his latest researches in early Babylonian civilization and chronology and exhibited a number of important antiquities recently acquired by him for the Archaeological Department of the University of Pennsylvania, during his stay in Constantinople and Asia Minor. He laid before the Society the earliest written record from Babylonia so far as known. This document, according to Prof. Hilprecht, was written in the sixth millennium B.C. Its ideograms and phonograms are still hieroglyphs. The only document of a hitherto unknown South Babylonian king, *Engéyal* of the

fifth millennium, was next treated. A number of the extremely rare Kappadolian tablets, of which more than sixty have been obtained for the University of Pennsylvania through Dr. Hilprecht's efforts during the last four years, a historical document of the time of King Nabonidus and a marble vase of King Artaxerxes with four inscriptions in Persian, Median, Babylonian and Egyptian languages were likewise exhibited and partly interpreted.

Dr. Charles L. Leonard then read a paper on a "New Physical Property of the X-Ray."

Dr. Frazer reported that the preparation of the plates for the reproduction of the signature book would require an additional appropriation of \$80.

On motion of Mr. McKean, the appropriation was made.

Mr. Goodwin then moved that the Secretaries be instructed to prepare from the plates now made 250 copies, to be sold only to members at cost, not more than one copy to be purchased by any one member until further orders from the Society. Carried.

Dr. Morris moved that the Society present to the Wistar Institute a bust of Franklin and one of Dr. Wistar, these being in duplicate. Carried.

The rough minutes were then read, and the Society adjourned.

New Physical Phenomena of the X-Ray.

By Charles Lester Leonard, A.M., M.D.

(Read before the American Philosophical Society, November 20, 1896.)

The physical phenomena connected with the x-ray are at present limited to those announced by their discoverer, Prof. Wilhelm Konrad Röntgen. They are their power to penetrate substances formerly considered opaque, their chemical action exhibited upon the photographic film and fluorescent screen, and their power of discharging electrified bodies whether positively or negatively charged.

The simple experiments which I conducted at the Pepper Laboratory